ABSTRACT OF THE DISCLOSURE

A method of using a buoyancy fluid presenting density that is less than that of sea water, and that is confined in a rigid or flexible leaktight casing, so as to constitute an immersed buoyancy element, wherein the buoyancy fluid is a compound that is naturally in the gaseous state at ambient atmospheric temperature and pressure, and in the liquid state at the underwater depth to which the buoyancy element is immersed. The present invention also relates to a method of putting a buoyancy element into place between the surface and the bed of the sea, wherein the fluid is stored in a tank on a surface ship as a liquid in the cooled or compressed liquid state, and it is injected in the liquid state into a pipe from the surface where it is stored to an said immersed casing at an underwater depth at which the underwater pressure is not greater than the vapor pressure of the gas corresponding to the compound at the temperature at the depth.